

## Claims

1. A method for detecting negatively supercoiled DNA in cells, characterized by including the steps of incorporating biotinylated psoralen into cells, irradiating the cells with long-wavelength UV rays, causing the cells to react with adivin which has been labeled with a color-developing substance, a fluorescent substance, or a chemiluminescent substance, and measuring developed color, emitted fluorescence, or emitted chemiluminescence of the cells.

2. A method for detecting a cell containing negatively supercoiled DNA, characterized by including the steps of incorporating biotinylated psoralen into cells, irradiating the cells with long-wavelength UV rays, causing the cells to react with adivin which has been labeled with a color-developing substance, a fluorescent substance, or a chemiluminescent substance, and measuring developed color, emitted fluorescence, or emitted chemiluminescence of the cells.

3. The detection method according to claim 1 or 2, wherein the cells are eukaryotic cells.

4. The detection method according to any one of claims 1 to 3, wherein incorporation of biotinylated psoralen into cells is performed in the presence of a cell membrane permeation promoting agent.